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 FOLDER EWEWETAK FOLDER # 10
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DIRECTOR		US	✓	INIT
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Review				
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October 6, 1978

Mr. Hal Hollister
 Director, Division of Operational
 and Environmental Safety
 Department of Energy
 Washington, D.C. 20545

Dear Hal:

The Northern Marshall Islands Advisory Group met on October 3-4, 1978 to consider the issue of planting coconuts on Enewetak Atoll, recommend cleanup guidance for subsurface contamination, discuss the Enjebi experimental farm, review preliminary results of the plowing experiment and be briefed by Tommy McCraw on the status of the Northern Marshall Islands Survey. The Advisory Group offers the following comments:

1. Planting of Coconut Trees on Northern Islands of Enewetak

The Advisory Group concurs with the letter of September 9 to Vice Admiral R. R. Monroe from L. J. Deal.

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A final decision concerning the permissible degree of occupancy of the northern islands can be made only after conclusion of the present cleanup effort and after requisition of additional information on applicable living habits and food chains and the movement of radionuclides (particularly ⁹⁰Sr and ¹³⁷Cs) through these food chains. Pending this evaluation it would be unfortunate if steps were taken that would encourage the Enewetak people to believe that a decision had already been made. This is particularly cogent in view of the unfortunate experience at Bikini. That experience suggests that coconuts grown on the northern islands might not be suitable for human consumption and might not be suitable for copra production. To plant coconut trees on the northern islands at this time might, therefore, require their early future destruction, which would have unfortunate public relations repercussion. Alternatively it might require restricting their consumption, which the Bikini experience would indicate to be ineffective.

2. Cleanup Guidance for Subsurface Contamination

In some situations, such as those with the subsurface contamination at Boken and Enjebi, it is not appropriate to apply a generic plan such as the operation plan. Instead, in situations as well defined as these, it is better to rely on judgments specific to these situations. We would, therefore, recommend that the identified pockets of contamination on Boken be removed and that the contamination on Enjebi be left, unless further definition of the subsurface pockets indicate pockets exceeding 160 pCi/gm. Consideration should be given to removal of the asphalt under the soil on Enjebi so that vegetation will grow.

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Such situation-specific judgment might be considered in any case where the OPLAN conditions are inadequate to fully represent the situation, or where it is unclear how the conditions are to be applied.

3. Enjebi Experimental Farm

During the course of several meetings the group has had the opportunity to refer to data that might be obtained from the farm on Enjebi. During its visit to the atoll in August the group briefly visited the farm. The group has the impression that the farm has considerable potential for providing information on the relationships between radionuclides in soil and edible crops. Such information is of paramount importance in making informed recommendations about the future use of the northern islands of Enewetak Atoll.

Based on our limited information concerning the farm and on our visit to it, we are particularly concerned that the farm will not be able to provide in a timely manner the information needed. The three areas of greatest concern to the committee are:

1. The adequacy of present plantings both as to number of species and number of plants of a given species?
2. The adequacy of current and projected maintenance procedures for the farm.
3. The extent to which the farm's operation is adequately integrated into an overall plan for making radiological hazard assessments for Enewetak Atoll including the ultimate decision about rehabilitation of the northern islands.

The group strongly recommends that the role of the farm as a part of an overall integrated plan for making radiological assessments be carefully evaluated. If the farm has a key role, it should be clearly defined and adequately supported to carry out its mission.

4. Plowing Experiment

A review of preliminary data from the plowing experiment suggests that plowing decreased the potential for resuspension of plutonium since the plutonium in the surface soils appeared to be nearly uniformly mixed with all of the plowed soil. Thus, plowing probably would reduce the amount of plutonium that could be inhaled. However, while plowing might reduce the health risk

from inhaled plutonium, the possibility remains that plowing could increase the availability of ^{90}Sr and ^{137}Cs to plant roots. The Advisory Group will wait until comparative data are available on the levels of ^{90}Sr and ^{137}Cs in plowed and unplowed soil before commenting further on plowing. Dose assessments for the two conditions would be especially useful if ^{90}Sr and ^{137}Cs , as well as the transuranics, were considered.

Sincerely yours,

W. J. Bair, Ph.D.
Manager
Environment, Health and Safety
Research Program

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cc: Madaline Barnes